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Reply to Office Action of January 19, 2007

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REMARKS

In the Office Action dated January 19, 2007, claims 1-20 are pending and claims 1-20 stand rejected. Reconsideration is requested at least for the reasons discussed hereinbelow.

Claim 1 has been amended to more particularly point out and distinctly claim the subject matter regarded as invention. No new matter is added. The scope of the claim is not changed. For example, the amendment merely further clarifies that the memory is on the sheet as the prior reference for the memory and makes other references to various recited elements more specific.

Claims 1-4, 12 and 13 are rejected under 35 U.S.C. §102(b) over Imai (US 5,512,977). Applicants strongly disagree.

An important difference between the present invention and cited reference Imai is in a memory for storing an encryption key. The present invention provides a memory on a sheet for writing an encryption key. On the other hand, Imai, who indicates the existence of a memory ("MEMORY 5" IN FIG. 1) for writing an encryption key, teaches providing the memory ("MEMORY 5") within an encryption device. In other words, Imai does not teach or suggest the construction in claim 1 of the present invention, "writing unit for writing the encryption key into the memory on the sheet" and the construction in claims 2 and 12, "memory reading unit for reading the encryption key from the memory on the sheet when the image reading unit reads the image".

Imai discloses a copying machine that can encipher information read from a medium such as paper. An encryption key may be generated for each use or an already generated encryption key may be used again. The enciphered information can be written to another medium such as paper. When decryption processing is performed, information is read from the medium in which the enciphered information is written. The read information is deciphered using as a decryption key the same key as

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the encryption key used in the encryption process. The deciphered information is written to another medium such as paper.

However, the present invention, as set forth in claim 1, provides:

[a]n image forming apparatus including an acquisition unit for acquiring an image signal, and an image forming unit for forming an image based on the image signal acquired by said acquisition unit **on a sheet having one or a plurality of memories**, comprising:

an encryption key creating unit for creating an encryption key when said acquisition unit acquires an image signal;

an encrypting unit for encrypting the image signal with the encryption key created by said encryption key creating unit; and

a writing unit for writing the encryption key into the memory **on said sheet having one or a plurality of memories**,

wherein said image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**.

Imai **fails** to teach or suggest an image forming apparatus having, for example, a writing unit for writing the encryption key into the memory **on said sheet having one or a plurality of memories**, wherein said image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**, as claimed herein.

With respect to claims 2 and 12, Imai also **fails** to teach or suggest an image forming apparatus having, for example, an image reading unit for **reading the image formed on said sheet** having one or a plurality of memories and a memory reading

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unit for reading the encryption key from the memory when said image reading unit reads the Image, as claimed herein. At column 2, referenced by the Examiner, Imai merely describes a copying machine having an encryption function. There is not even a hint of a suggestion for an image forming apparatus having, for example, an image reading unit for reading the image formed on said sheet having one or a plurality of memories and a memory reading unit for reading the encryption key from the memory when said image reading unit reads the image, as claimed herein. There is no disclosure in Imai for a **sheet** having one or a plurality of memories, much less an apparatus having a memory reading unit for reading the encryption key from the memory on the sheet when said image reading unit reads the Image on the sheet.

With respect to claim 3, Imai *fails* to teach or suggest an image forming apparatus having an information acquiring/creating unit for acquiring or creating information about the image encrypted with the encryption key, wherein said writing unit writes the encryption key and the information acquired or created by said information acquiring/creating unit into the same memory, or different memories on said sheet having one or a plurality of memories, as claimed herein. Again the Examiner refers to column 2 where Imai merely describes a copying machine having an encryption function. There is not even a hint of a suggestion for an image forming apparatus having, for example, an information acquiring/creating unit for acquiring or creating information about the image encrypted with the encryption key, wherein said writing unit writes the encryption key and the information acquired or created by said information acquiring/creating unit into the same memory, or different memories on said sheet having one or a plurality of memories, as claimed herein. There is no disclosure whatsoever in Imai for an information acquiring/creating unit for acquiring or creating information about the image encrypted with the encryption key, much less where writing unit writes the encryption key and the information acquired or created by said information acquiring/creating unit into the same memory, or different memories on said sheet having one or a plurality of memories.

Regarding claims 4 and 13, Imai also *fails* to teach or suggest an image forming apparatus having a memory reading unit that reads the encryption key and information

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about the image encrypted with the encryption key from the same memory, or different memories on said sheet having one or a plurality of memories, when said image reading unit reads the image, as claimed herein. There is no disclosure whatsoever in Imai for an information acquiring/creating unit for acquiring or creating information about the image encrypted with the encryption key, much less reading it from memory.

Claims 5-11 and 14-20 are rejected under 35 U.S.C. §103(a) over Imai in view of Harrada et al. (US 20030007640; "Harrada"). Applicants strongly disagree. Imai is discussed above. Harrada *fails* to make up for the deficiencies in Imai. Harrada also fails to teach or suggest, for example:

an image forming apparatus having, for example, a writing unit for writing the encryption key into the memory **on said sheet having one or a plurality of memories**, wherein said image forming unit forms an image based on the image signal encrypted by said encrypting unit **on said sheet having one or a plurality of memories**,

an image reading unit for reading the image formed on said sheet having one or a plurality of memories and a memory reading unit for reading the encryption key from the memory when said image reading unit reads the image,

an information acquiring/creating unit for acquiring or creating information about the image encrypted with the encryption key, wherein said writing unit writes the encryption key and the information acquired or created by said information acquiring/creating unit into the same memory, or different memories on said sheet having one or a plurality of memories, or

a memory reading unit that reads the encryption key and information about the image encrypted with the encryption key from the same memory, or different memories on said sheet having one or a plurality of memories, when said image reading unit reads the image,

as claimed herein.

Further with respect to claims 7 and 16, neither Imai, nor Harrada, nor their combination teach or suggest that the image forming unit forms the number of times (the decrypted image is formed on a sheet) in a visually inconspicuous form within a

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region where the image is formed. The Examiner states only that Imai and Harrada disclose an apparatus capable of prohibiting illegal copying, and Imai discloses a control circuit that accepts input data from keyboard and displays necessary data. It is not seen where the cited combination discloses that the image forming unit forms the number of times (the decrypted image is formed on a sheet) in a visually inconspicuous form within a region where the image is formed, as claimed herein.

Further with respect to claims 10 and 19, it is not seen where the combination of Imai and Harrada disclose an apparatus wherein the information read by said memory reading unit includes one or a plurality of identifiers of image forming apparatus, as claimed herein. There is not even a hint of a suggestion for storing an identifier of the image forming unit in the cited prior art combination.

Also, with respect to claims 11 and 20, it is not seen where the combination of Imai and Harrada disclose an apparatus wherein the memory reading unit includes a code and an input code is compared with the code in memory to determine whether to decrypt the image signal. The Examiner refers to permissive conditions set forth in Harrada for making the decrypted image, however, those conditions fail to include a code. They merely refer to permissive numbers of copies or permissive periods for making copies and the like.

Thus, it is not seen how the presently claimed invention would have been obvious to one of ordinary skill in the art in view of any combination of Imai and Harrada.

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In view of the discussion above, Applicants respectfully submit that the pending application is in condition for allowance. An early reconsideration and notice of allowance are earnestly solicited.

Dated: April 17, 2007

Respectfully submitted,

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